

REMARKS

Claims 1-12 and 14-21 and 24 are now pending in the application. Claims 1-12 and 14-11 and 24 stand rejected. Claims 13, 22 and 23 have been cancelled. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

SPECIFICATION

The Office objects to the title of the invention, commenting that a new title is required that is clearly indicative of the invention to which the claims are directed. Applicants respectfully submit that the claims have been amended, as set forth above, to recite limitations directed toward a aeronautical vehicles. As such, the title, "METHOD AND APPARATUS FOR REMOTE INITIATION OF ARINC 615 DOWNLOADS" is clearly indicative of the invention to which the claims are directed. Applicants therefore request that the objection to the title be withdrawn.

REJECTION UNDER 35 U.S.C. § 112

A. Claims 1-12, 14-20 and 24 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. This rejection is respectfully traversed.

Claims 1, 2, 11, 12, 20 and 24 have been amended, as set forth above, to recite limitations directed toward an aeronautical vehicle.

Applicants respectfully submit that the acronym ARINC (Aeronautical Radio, Inc.) is used throughout the specification of the present application. Applicants further respectfully submit that those skilled in the art to which the present application is directed would readily and clearly understand that the ARINC standards, protocols, equipment and systems are applicable to all aeronautical vehicles throughout the avionics industry, to include aircraft, helicopters, etc. Accordingly, Applicants respectfully submit that amended Claims 1, 2, 11, 12, 20 and 24, directed toward aeronautical vehicles, are clearly supported throughout the specification of the present application such that one skilled in the art would be enabled to make and use the invention. Thus, Applicants respectfully submit that amended Claims 1, 2, 11, 12, 20 and 24 satisfy the enablement requirement of §112 first paragraph.

Claims 3-10 depend from amended Claim 1 and Claims 14-19 depend from amended Claim 11. When the recitations of Claims 3-10 and 14-19 are considered in combination with the recitations of the respective amended Claims 1 and 11, Applicants respectfully submit that Claims 3-10 and 14-19 also satisfy the enablement requirement of §112 first paragraph.

Therefore, Applicants respectfully request that the §112 rejections of Claims 1-12, 14-20 and 24 be withdrawn.

B. Claims 22 and 23 stand rejected under 35 U.S.C. §112, second paragraph. Claims 22 and 23 have been cancelled. Thus, Applicants respectfully submit that the §112 rejections of Claims 22 and 23 are rendered moot.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-12, 14-21 and 24 stand rejected under 35 U.S.C. § 102(f) as not being subject matter invented by the Applicants. This rejection is respectfully traversed.

The Office comments that it believes that the currently claimed invention has been derived from the provisional application 60/268,085, from which the present application claims priority, and from issued patent 6,671,589, which also claims priority to the provisional application 60/268,085. The Office further comments that the common inventor for the provisional '085 application and the present application is a non-signing inventor.

Applicants respectfully submit that although the facts set forth by the Office are correct, they do not provide prima facie support for a §102(f) rejection. Applicants respectfully point out that Applicants submitted a proper petition under 37 C.F.R. §1.47, which was granted by the Office on December 3, 2002. Further, Applicants respectfully submit that Claims 1-12, 14-21 and 24 of the present application recite limitations directed toward subject matter described in the provisional '085 application and additional subject matter not specifically described in the provisional '085 application. Thus, Applicants respectfully submit that the subject matter recited in at least one of Claims 1-12, 14-21 and 24 of the present application was conceived by each of the signing co-inventors. Accordingly, Applicants respectfully submit that the inventorship of the present application is proper and that the §102(f) rejection is improper.

Therefore, Applicants respectfully request that the §102(f) rejection of Claims 1-12, 14-21 and 24 be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

1. Claims 1-12 and 14-21 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murray et al. (U.S. Pat. No. 6,385,513) in view of Wright et al. (U.S. Pub. No. 2003/0148,736). This rejection is respectfully traversed.

A. Regarding Claims 1-11, Claim 1 had been amended as set forth above to recite, "A method for remotely downloading data to a selected one of a plurality of electronic line replaceable units (LRUs) on an aeronautical vehicle, said method comprising: transmitting a message wirelessly to a receiver on the aeronautical vehicle identifying an LRU to which data is to be downloaded; remotely operating a software-controlled switch to electronically configure a communication path between the identified LRU and an aeronautical vehicle data services link in response to said message identifying the LRU; and wirelessly downloading data from the receiver to the identified LRU utilizing the remotely electronically configured communication path."

Neither Murray et al. or Wright et al., nor the combination thereof describe, show or suggest a method for remotely downloading data to a selected one of a plurality of line replaceable units (LRUs) on an aeronautical vehicle including the limitations recited in amended Claim 1. For example, neither Wright et al., Houlberg et al. nor the combination thereof describe, show or suggest a method for remotely downloading data to a selected one of a plurality of line replaceable units (LRUs) on an aeronautical vehicle that includes remotely operating a software-controlled switch to electronically configure a communication path between an identified line replaceable unit (LRU) and an aeronautical vehicle data services link (ADSL) in response to a command from a receiver identifying the LRU.

Rather, Murray et al. describes a satellite emergency voice/data downlink method and apparatus that sends cockpit audio and flight data to a satellite communications system upon detection of a serious event or a pilot generated signal. The apparatus includes airborne communication equipment 100 resident on multiple aircraft 16 includes, for example, satellite terminal or telecommunications unit (STU)

102, which is essentially a mobile switch, allowing several users, including passengers, flight crew and automated avionics systems, to share the radio channel units (RCU's) 110 contained within satellite telecommunications unit 102. The invention monitors key flight parameters, including warning system outputs, preferably via standard ARINC 429 input channels. The invention includes an input channel coupled to receive the output of one or more warning systems, such as ground proximity warning devices. The invention includes one or more additional input channels coupled to directly receive the output of on-board flight sensors, such as cabin pressure status, engine status, hydraulic system status, and other on-board flight sensors. The invention monitors the status of such flight sensors and regularly compares the current status of each to a range of acceptable values and determines any out-of-range conditions. *The invention responds to one or more selected warning system outputs, i.e., the out-of-limit announcements generated by on-board central fault display system/central maintenance computer 158 and/or detection of an out-of-range condition of any one or more of selected ones of the flight sensors, and/or a warning of a threat or impending collision by one or more of the on-board ground proximity warning system or a Traffic Alert And Collision Avoidance System (TCAS), by collecting cockpit audio and relevant flight parameter data in to data packets and automatically initiating a downlink of selected ones of the audio and flight parameters data to a ground-based data storage center.*

Additionally, Wright et al. describes a flight information communication system having a plurality of *RF direct sequence spread spectrum ground data links* that link respective aircraft-resident subsystems, in each of which a copy of its flight performance data is stored, with airport-located subsystems. The *airport-located subsystems* are coupled by way communication paths, such as land line telephone links, to a remote flight operations control center. At the flight operations control center, *flight performance data downlinked from plural aircraft parked at different airports is analyzed.*

Therefore, neither Murray et al. or Wright et al., nor the combination thereof describe, show or suggest a method for remotely downloading data to a selected one of a plurality of line replaceable units (LRUs) on an aeronautical vehicle including the limitations recited in amended Claim 1.

Furthermore, Applicants respectfully submit that there is no teaching, suggestion or motivation supporting a combination of the cited references. Obviousness cannot be established by merely suggesting it would have been obvious to one of ordinary skill in the art to have selected an alternative design choice. The references themselves must provide some teaching whereby Applicants' combination would have been obvious. *Interconnect Planning*, 227 USPQ 551.

Therefore, for at least the reasons set forth above, Applicants respectfully submit that amended Claim 1 is patentable over Murray et al. in view of Wright et al.

Claims 2-11 depend from amended Claim 1. Therefore, when the recitations of Claims 2-11 are considered in combination with the recitations of amended Claim 1, Applicants submit that Claims 2-11 are likewise patentable over Murray et al. in view of Wright et al.

B. Regarding Claims 11, 12 and 14-19, Claim 11 has been amended, as shown above, to recite limitations similar to the limitations recited in amended Claim 1. Thus, in accordance with the remarks set forth above with regard to amended Claim 1, Applicants submit that amended Claim 11 is likewise patentable over Murray et al. in view of Wright et al.

Claims 12 and 14-19, depend from amended Claim 11. When the recitations of Claims 12 and 14-19 are considered in combination with the recitations of amended Claim 11, Applicants submit that Claims 12 and 14-19 are likewise patentable over Murray et al. in view of Wright et al.

C. Regarding Claim 20, Claim 20 has been amended, as shown above, to recite limitations similar to the limitations recited in amended Claim 1. Thus, in accordance with the remarks set forth above with regard to amended Claim 1, Applicants submit that amended Claim 20 is likewise patentable over Murray et al. in view of Wright et al.

D. Regarding Claim 21, Claim 21 has been amended, as shown above, to recite limitations similar to the limitations recited in amended Claim 1. Thus, in accordance with the remarks set forth above with regard to amended Claim 1, Applicants submit that amended Claim 21 is likewise patentable over Murray et al. in view of Wright et al.

E. Regarding Claim 24, Claim 24 has been amended, as shown above, to recite limitations similar to the limitations recited in amended Claim 1. Thus, in accordance with the remarks set forth above with regard to amended Claim 1, Applicants submit that amended Claim 24 is likewise patentable over Murray et al. in view of Wright et al.

For at least the reasons set forth above, Applicants respectfully request that the §103 rejections of Claims 1-12 and 14-21 and 24 be withdrawn.

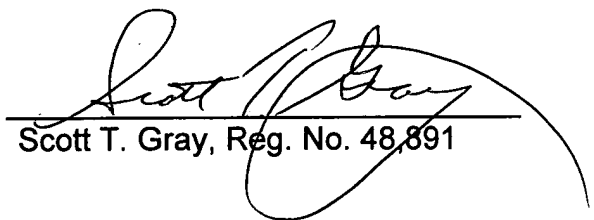
CONCLUSION

Applicants respectfully submit that no new matter has been added by the forgoing amendments. Applicants request entry of the foregoing amendments prior to examination of this application. Favorable action is respectfully solicited.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7525.

Respectfully submitted,

Dated: 3/13/06

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